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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/532,357	03/21/2000	Essam Sourour	8194-368	7332
20792	7590	12/20/2004	EXAMINER	
MYERS BIGEL SIBLEY & SAJOVEC			PIZARRO, RICARDO M	
PO BOX 37428			ART UNIT	
RALEIGH, NC 27627			PAPER NUMBER	
			2661	

DATE MAILED: 12/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/532,357	<b>Applicant(s)</b> SOUROUR, ESSAM	
	<b>Examiner</b> Ricardo Pizarro	<b>Art Unit</b> 2661	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 September 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 17, 21, 25-26, 29, 33, 36 is/are rejected.
- 7) ☒ Claim(s) 2-16, 18-20, 22, 24, 27, 28, 30-32, 34 and 35 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

### DETAILED ACTION

Finality of the Office Action dated 8/5/04 is hereby withdrawn

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

1. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Moon. US patent No. 6,671,266 ( Moon et al) discloses a Device and method for controlling powers of orthogonal and quasi orthogonal channels in a CDMA communication system comprising a method of transmitting by generating an interference-compensated information symbols ( compensation provided by controller at BS by adjusting the transmission power of the respective channels, col 6 lines 36-45) from a source information system based on knowledge of an information symbol ( based on information signal , col 6 lines 41) and a first code ( code from orthogonal sequence col 6 line 50) used to generate a first coded signal ( signal generated from said sequence) and concurrently transmitting the first coded signal and a second coded

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signal ( second signal generated from quasi orthogonal sequence, col 4 lines 27-28) representing the interference-compensated information symbol encoded according to a second code ( base station compensates interference transmitting a message by having the controller to adjust the power control ratio by increasing/decreasing power of the quasi orthogonal channel, col 7 lines 33-37, col 8 lines 16-26) as in claim 1.

2. Claims 21, 25-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Moon.

US patent No. 6,671,266 ( Moon et al) discloses a Device and method for controlling powers of orthogonal and quasi orthogonal channels in a CDMA communication system comprising a method of transmitting including at least one transmitter ( base station in Fig. 1) that generates an interference-compensated information symbols (compensation provided by controller at BS by adjusting the transmission power of the respective channels, col 6 lines 36-45) from a source information symbol based on knowledge of information symbol I( based on information signal , col 6 lines 41) and a first code ( orthogonal codes col 6 line 50) used to generate a first coded signal and that concurrently transmits the first coded signal and a second signal representing the interference-compensated information symbol encoded according to a second code ( signals combined at adder 20 in Fig. 1 , base station compensates interference transmitting a message by having the controller to adjust the power control ratio by increasing/decreasing power of the quasi orthogonal channel, col 7 lines 33-37, col 8 lines 16-26) , as in claim 21; at least one base station ( element 21 in fig. 2), as in claim 25;

3. Claim 29 is rejected under 35 U.S.C. 102(e) as being anticipated by Moon.

US patent No. 6,671,266 ( Moon et al) discloses a Device and method for controlling powers of orthogonal and quasi orthogonal channels in a CDMA communication system comprising a transmitting station ( base station in Fig. 1) comprising means for generating an interference-compensated information symbols (base station compensates interference transmitting a message by having the controller to adjust the power control ratio by increasing/decreasing power of the quasi orthogonal channel, col 7 lines 33-37, col 8 lines 16-26) , from a source information symbol based on knowledge of an information symbol and a first code ( orthogonal code, col 6 line 50) used to generate a first coded signal and means for concurrently transmitting the first coded signal and a second signal representing transmitting the first coded signal and a second signal ( signals combined at adder 20 and transmitted from BS in Fig. 1 ) representing the interference-compensated information symbols encoded according to a second code ( signals combined at adder 20 in Fig. 1 , base station compensates interference transmitting a message by having the controller to adjust the power control ratio by increasing/decreasing power of the quasi orthogonal channel, col 7 lines 33-37, col 8 lines 16-26) , as in claim 29.

4. Claim 33 , 36 is rejected under 35 U.S.C. 102(e) as being anticipated by Moon.

US patent No. 6,671,266 ( Moon et al) discloses a Device and method for controlling powers of orthogonal and quasi orthogonal channels in a CDMA communication system comprising a communication base station ( base station in Fig. 1) comprising an interference-compensating transmitter ( compensation function performed by

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controller at BS in Fig. 1) operative to transmit on respective channels defined by respective spreading codes selected from a quasi-orthogonal spreading codes (orthogonal and quasi-orthogonal codes, col 6 lines 50-51), said set including a first group of orthogonal spreading coded (orthogonal codes from first spreading sequence of a set of spreading sequences, col 4 line 13) and a second group of orthogonal spreading codes (code from second spreading sequence, col 4 line 28), said transmitter operative to generate an interference-compensated information symbol (symbol is generated from the interference compensated correlations, col 3 lines 60-61, col 4 line 10) from a source information symbol based on knowledge of an information symbols and a code from the first group of codes used to generate a first coded signal (signal from first spreading sequence) and to concurrently transmit a second coded signal (signal from second spreading sequence) representing the interference-compensated symbol encoded according to a code from the second group of codes (signals combined at adder 20 in Fig. 1, base station compensates interference transmitting a message by having the controller to adjust the power control ratio by increasing/decreasing power of the quasi orthogonal channel, col 7 lines 33-37, col 8 lines 16-26), as in claim 33; wherein said transmitter concurrently transmits the first and second coded signals (signals are joined at adder 20 in Fig. 1 and transmitted concurrently), as in claim 36

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moon US patent No. 6,671,266 ( Moon et al) discloses a Device and method for controlling powers of orthogonal and quasi orthogonal channels in a CDMA communication system comprising in a wireless communication system in which at least one base station ( base station in Fig. 1) is operative to transmit on respective channels defined by respective spreading codes selected from a set of quasi-orthogonal spreading codes ( quasi-orthogonal codes , col 6 line 51), said set including groups of orthogonal codes ( different sets of orthogonal codes) comprising generating an interference compensated information symbol based on knowledge of an information symbol ( base station transmits a message by having the controller to the power control ratio by increasing/decreasing power of the quasi orthogonal channel, col 8 lines 16-26, said symbol based on information signal , col 6 lines 41) and a code from the first group used to generate a first coded signal and concurrently transmitting the first coded signal and a second coded signal representing the interference-compensated information symbol ( signals are combined at adder 20 and concurrently transmitted from BS in Fig. 1), as in claim 17.

Moon did not specifically disclose a first and a second group of orthogonal codes

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However it is well know to a person of ordinary skill in the art in a CDMA system for purposes of channel separation, different sets of orthogonal codes are assigned to the respective channels.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention that the Mon system includes separate groups of orthogonal codes with the motivation of obtaining a method to control the transmission power in a CDMA system using orthogonal and quasi orthogonal codes.

***Allowable Subject Matter***

6. Claims 2-16, 18-20, 22-24, 27-28, 30-32, 34-35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claim. Please also notice objection to claims under 37 CFR 1.75

***Conclusion***

7. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

(703) 872-9306

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(for formal communications intended for entry, for informal or draft communications, please label "PROPOSED" or "DRAFT")


Hand-delivered responses should be brought to 220 South 20<sup>th</sup> Street, Crystal Plaza Two, Lobby, Room 1B03, Arlington, Va 22202 (Customer Window).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Ricardo Pizarro** whose telephone number is (571) 272-3077. The examiner can normally be reached on Monday-Friday from 9:00 AM to 5:30 PM. The fax number for this Group is (703) 872-9306.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Kenneth Vanderpuye** can be reached on (571) 272-3078.

December 10, 2004

*Ricardo M. Pizarro*

  
KENNETH VANDERPUYE  
PRIMARY EXAMINER